

Amendments to the Claims

Please amend claim 21 and add claim 55 as follows.

21. (Amended) A method for replacing a section of blood vessel inner layer comprising the steps of:

forming an incision into the blood vessel;

removing a section of an inner layer of the blood vessel through the incision, wherein the removal creates at least one end flap in a remaining blood vessel inner layer;

providing an artificial blood vessel inner layer comprising a diameter arranging element at one end thereof, creating an expandable end, and a supply tubular section having inner and outer surfaces;

inserting the expandable end of said artificial inner layer into said blood vessel through the incision in the direction of blood flow; and

positioning said artificial inner layer within said blood vessel so that said expandable end is positioned adjacent said remaining blood vessel inner layer at a downstream location from said incision so that the artificial inner layer covers the end flap; and

retaining said expandable end against said blood vessel by said diameter arranging element.

55. (New) A method as in claim 21 wherein the positioning step is carried out so the diameter arranging element presses against the end flap.